

PATENT

Atty. Dkt. No. NVDA P000721

REMARKS

This is intended as a full and complete response to the Office Action dated February 7, 2005, having a shortened statutory period for response set to expire on May 7, 2005. Claims 9-15 are cancelled. Claims 1 and 16 are amended to more clearly recite the scope of the claimed invention. New claims 24-32 are added to cover the full scope of the invention. Reconsideration and allowance of the claims pending in the application is requested for reasons discussed below.

In this Office Action, the sole rejection of the claims was under 35 U.S.C. 103(a) as being unpatentable over *Krech*, U.S. 6,057,852. This rejection is respectfully traversed. In summary, the Examiner generally alleges that *Krech* discloses his device using generally the same terminology as used in the present application. The Examiner then concludes by saying that, since the same terminology is used, the claims are obvious.

As to claims 16-23, the Examiner does not even assert that the same terminology is used; instead, the Examiner acknowledges that different terminology is used but asserts that *Krech* discloses means (not identified) which perform similar functions to what is claimed. The Examiner does not identify the means to which he is referring or provide any comparison of the reference to the claims. Both of these arguments are respectfully traversed.

The present invention is intended to facilitate processing of primitives in a GPU by providing a method for accessing primitive data based on vertices of a originating primitive, and then utilizing connectivity information to adjacent primitives to generate a overall primitive extension. The data and connectivity information preferably includes widths, step size, and anchor width information, examples of which are set forth in Table III of the application. The inventor has analyzed and disclosed a number of topologies shown in Figures 7-12 of the application, and has explained how vertex information may be broken down and analyzed based on Figures 1-6 of the application. The application then explains how primitive extensions may be generated, based on the originating primitive and the vertex data provided to a general program or a state machine. The

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resulting output data may include generalized strips or fans of primitives and a stream of vertices for such primitives with the data being in a form which may be easily operated on to generate a surface. These method steps, and additional more particularized steps, are covered by claims 1-8 and 24-28.

The method of claims 16-17, 19-20, 22-23 and 29-32 covers generation of a primitive extension represented in an ordered data stream (see the examples in Figures 9B-12B). The portions of the data stream indicate how primitives and primitive volumes (see corresponding Figures 9A-12A) are generated and defined.

A close review of the cited *Krech* reference establishes that he does not teach any of these steps of generating a generalized primitive based on an originating primitive, a primitive extension and parameter data utilizing a programmable method. As conceded by the Examiner, *Krech* does not disclose or suggest using vertex data such as width, step size, and anchor width to generate primitive extensions; *Krech* does not teach the use of an anchor vertex to relate an originating primitive to adjacent primitives. Therefore, *Krech* does not teach any part of the method of claims 1-8 and 24-28.

Also, *Krech* does not disclose or suggest the generation of an ordered data stream as claimed herein which includes data defining a connection between an originating primitive and a connected primitive within a generalized primitive. Further, the data is ordered so that intermediate primitives may be easily defined by the claimed method. The *Krech* patent does not teach any part of the methods of claims 16-17, 19-20, 22-23 and 29-32.

As the foregoing illustrates, the reference uses only the same language, and is selected from generally the same art as found in the application, but fails to teach the steps of the methods claimed herein. Therefore, reconsideration and allowance of the claims is respectfully requested.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

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Should some matters remain unresolved after review of this response, the Examiner is urged to call the undersigned attorney.

Respectfully submitted,


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